What is claimed:

1. A method for identifying a compound capable of modulating polycystin-1 activity, comprising:

(a) contacting a test compound to a recombinantly engineered cell expressing a polycystin-1 protein, or a variant thereof, resulting in expression of a mutant cell phenotype;

(b) measuring the expression of the mutant phenotype; and

(c) comparing the level of expression of the mutant phenotype obtained in (b) to the level of expression of a mutant phenotype obtained in the presence of a vehicle control:

such that if the level obtained in (b) differs from that obtained in the presence of a vehicle control, a compound capable of modulating polycystin-1 activity has been identified.

2. The method of Claim 1 wherein the mutant phenotype is an increase in cell adherence to type I collagen coated substrates.

3. The method of Claim 1 wherein the mutant phenotype is an increase in apical expression of NaK-ATPase on the cell membrane.

4. The method of Claim 1 wherein the mutant phenotype is increased expression of β-2-NaK-ATPase within the cell.

5. The method of Claim 4 wherein the expression of β-2-NaK-ATPase within the cell is measured using an anti-β-2-NaK-ATPase antibody.

6. The method of Claim 1 wherein the mutant phenotype is decreased incorporation of focal adhesion kinase into focal adhesion complexes.

7. The method of Claim 6 wherein the incorporation of focal adhesion kinase into focal adhesion complexes is measured using an anti-focal adhesion kinase antibody.

8. The method of Claim 1 wherein the recombinantly engineered cell further comprises an epitope tagged polycystin-1 interacting protein.

9. The method of Claim 1 wherein the recombinantly engineered cell further comprises an epitope tagged focal adhesion kinase protein.

10. The method of Claim 1 wherein the polycystin-1 protein, or varient thereof, is epitope tagged.

11. A method for identifying a compound capable of modulating polycystin-2 activity, comprising:

(a) contacting a test compound to a recombinantly engineered cell expressing a polyscystin-2 protein, or varient thereof, resulting in expression of a mutant cell phenotype;

(b) measuring the expression of the mutant phenotype; and

(c) comparing the level of expression of mutant phenotype obtained in (b) to the level of expression of a mutant phenotype obtained in the presence of a vehicle control:

such that if the level obtained in (b) differs from that obtained in the presence of a vehicle control, a compound capable of modulating polycystin-2 activity has been identified.

12. The method of Claim 11 wherein the mutant phenotype is an increase in cell adherence to type I collagen coated substrates.

13. The method of Claim 12 wherein the mutant phenotype is an increase in apical expression of NaK-ATPase on the cell membrane.

14. The method of Claim 13 wherein the mutant phenotype is increased expression of β-2-NaK-ATPase within the cell.

15. The method of Claim 14 wherein the expression of β-2-NaK-ATPase within the cell is measured using an anti-β-2-NaK-ATPase antibody.

16. The method of Claim 11 wherein the mutant phenotype is decreased incorporation of focal adhesion kinase into focal adhesion complexes.

17. The method of Claim 16 wherein the incorporation of focal adhesion kinase into focal adhesion complexes is measured using an anti-focal adhesion kinase antibody.

18. The method of Claim 11 wherein the recombinantly engineered cell further comprises an epitope tagged polycystin-2 interacting protein.

19. The method of Claim 11 wherein the recombinantly engineered cell further comprises an epitope tagged focal adhesion kinase protein.

20. The method of Claim 11 wherein the polycystin-2 protein, or varient thereof, is epitope tagged.

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